

### REMARKS

This Response is submitted in reply to the non-final Office Action dated February 24, 2010. No fees are due in connection with this Response. The Director is authorized to charge any fees that may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 3712036-00706 on the account statement.

Claims 1, 3-12, 14 and 15 are pending in this application. Claims 6-8, 12, 14 and 15 were previously withdrawn from consideration, and Claims 2 and 13 was previously canceled without prejudice or disclaimer. In the Office Action, Claims 1, 3-5 and 9-11 are rejected under 35 U.S.C. §§112 and 103. For at least the reasons set forth below, Applicants respectfully submit that the rejections should be reconsidered and withdrawn.

In the Office Action, Claims 1, 3-5 and 9-11 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Patent Office asserts that Claims 1, 9, 10 and 11 recite, in part, the phrase "natural lycopene concentrate" and that "natural" could be a relative term. See, Office Action, page 2, line 21-page 3, line 10. Applicants respectfully disagree and submit that the skilled artisan would immediately understand the scope of the phrase "natural lycopene concentrate" when read in view of the specification.

As is clearly stated in the specification, "[t]he aim of the present invention is to provide a 'natural' product with increase bioavailability, that is to say that the product has only been subjected to technological treatments which do not modify its native characteristics." See, specification (Preliminary Amendment), page 3, paragraph 7. The specification further states that "the process of extraction according to the invention is simple, rapid and economical and at no time subject to the state of viability of the endoenzymes of the raw material." See, specification, page 4, paragraph 8. As such, the skilled artisan would immediately appreciate that a "natural" lycopene concentrate is a lycopene concentrate that has not be subjected to technological treatments that would modify its native characteristics. Indeed, the specification clearly defines a "natural" lycopene concentrate as a lycopene concentrate that "has only been subjected to technological treatments which do not modify its native characteristics." Thus, not

only is the phrase "natural lycopene concentrate" explicitly defined in the specification, but the skilled artisan would immediately appreciate what it means to modify the native characteristics of a lycopene concentrate. For at least the above mentioned reasons, Applicants respectfully submit that Claims 1, 3-5 and 9-11 fully comply with the requirements under 35 U.S.C. §112, second paragraph.

Accordingly, Applicants respectfully request that the rejection of Claims 1, 3-5 and 9-11 under 35 U.S.C. §112, second paragraph, be reconsidered and withdrawn.

In the Office Action, Claims 1, 3-5 and 9-11 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,224,876 to Kesharlal et al. ("*Kesharlal*"). For at least the reasons set forth below, Applicants respectfully submit that *Kesharlal* is deficient with respect to the present claims.

Currently amended independent Claims 1 and 10-11 recite, in part, natural lycopene concentrates comprising at least 1 mg of lycopene per g of the said concentrate, not more than 30% proteins, not more than 30% polysaccharides, not more than 10% organic acids, and at least 30% of lipid compounds, wherein the concentrate is ingestible, in powder form and isolated from fibers and other insoluble compounds by solid-liquid separation, and wherein the concentrate is extracted from a lycopene-containing material without using a solvent.

As discussed in the specification, the presently claimed compositions contain natural lycopene concentrates having increased bioavailability. The increased bioavailability may be explained by the smaller size of the concentrate crystals that are obtained during processing. For example, the crystals obtained by the processes of the present specification are about 5 to 10 sizes smaller than those of the crystalline forms of oleoresin. Additionally, the raw lycopene materials used are more bioavailable because the technological treatments used to obtain the concentrate do not modify the native characteristics of the lycopene. See, specification, page 3, paragraph 7; page 5, paragraph 21. In contrast, Applicants respectfully submit that *Kesharlal* fails to disclose or suggest every element of the present claims.

For example, *Kesharlal* fails to disclose or suggest natural lycopene concentrates comprising at least 1 mg of lycopene per g of the said concentrate, not more than 30% proteins, not more than 30% polysaccharides, not more than 10% organic acids, and at least 30% of lipid compounds, wherein the concentrate is ingestible, in powder form and isolated from fibers and

other insoluble compounds by solid-liquid separation, and wherein the concentrate is extracted from a lycopene-containing material without using a solvent as required, in part, by independent Claims 1 and 10-11. Instead, *Kesharlal* is entirely directed to pharmacologically and biologically active compositions containing carotenoids, micro and macro nutrients and a process for their preparation from carrots. See, *Kesharlal*, Abstract; column 1, lines 8-12.

The Patent Office admits that *Kesharlal* fails to disclose or suggest not more than 30% protein, but states that because *Kesharlal* “teaches a protein range from about 10-50% protein that it would have been obvious for one of ordinary skill in the art to choose a particular protein content carrot from [a] different carrot species or supplier.” See, Office Action, page 4, line 19-page 5, line 15. However, Applicants respectfully disagree and submit that not only does *Kesharlal* fails to disclose or suggest the natural lycopene concentrates of the present claims, but *Kesharlal* teaches away from the presently claimed amounts of protein.

For example, as admitted by the Patent Office, *Kesharlal* fails to disclose or suggest not more than 30% protein as required, in part, by the present claims. Indeed, since *Kesharlal* “teaches a protein range from about 10-50%,” *Kesharlal* clearly discloses that protein amounts in the range of 30-50% are acceptable. However, this is in direct contrast to the present claims that explicitly require “no more than 30% proteins.” As such, the disclosure of *Kesharlal* clearly teaches away from the present claims. For at least the above-mentioned reasons, Applicants respectfully submit that *Kesharlal* is deficient with respect to the present claims.

Accordingly, Applicants respectfully request that the rejection of Claims 1, 3-5 and 9-11 under 35 U.S.C. §103(a) to *Kesharlal* be reconsidered and withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly request an early allowance of the same. In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Respectfully submitted,

K&L GATES LLP

BY 

Robert M. Barrett  
Reg. No. 30,142  
Customer No. 29157  
Phone No. 312-807-4204

Dated: May 12, 2010